

Contents

Volume 276 (1992)

Special Issue

Collaborative Study on Complex Mixtures edited by L. Claxton, J. Lewtas, G. Becking and M. Shelby

Preface

M. Mercier (Switzerland)

1

Research Papers

Design and implementation of a collaborative study of the mutagenicity of complex mixtures in *Salmonella typhimurium*

J. Lewtas, L.D. Claxton, H.S. Rosenkranz, D. Schuetzle, M. Shelby, H. Matsushita, F.E. Würzler, F.K. Zimmermann, G. Löfroth, W.E. May, D. Krewski, T. Matsushima, Y. Ohnishi, H.N.G. Gopalan, R. Sarin and G.C. Becking (U.S.A., Japan, Switzerland, Germany, Sweden, Canada, Kenya, India)

3

Standard reference materials for chemical and biological studies of complex environmental samples

W.E. May, B.A. Benner Jr., S.A. Wise, D. Schuetzle and J. Lewtas (U.S.A.)

11

Results of the IPCS collaborative study on complex mixtures

L.D. Claxton, J. Creason, B. Leroux, E. Agurell, S. Bagley, D.W. Bryant, Y.A. Courtois, G. Douglas, C.B. Clare, S. Goto, P. Quillardet, D.R. Jagannath, K. Kataoka, G. Mohn, P.A. Nielsen, T. Ong, T.C. Pederson, H. Shimizu, L. Nylund, H. Tokiwa, G.J. Vink, Y. Wang and D. Warshawsky (U.S.A., Canada, Sweden, France, Great Britain, Japan, The Netherlands, Denmark, Finland)

23

Sources of variation in the mutagenic potency of complex chemical mixtures based on the Salmonella/microsome assay

D. Krewski, B.G. Leroux, J. Creason and L. Claxton (Canada, U.S.A.)

33

Overview, conclusions, and recommendations of the IPCS collaborative study on complex mixtures

L.D. Claxton, G. Douglas, D. Krewski, J. Lewtas, H. Matsushita and H. Rosenkranz (U.S.A., Canada, Japan)

61

Characterization of organic extracts from standard reference materials 1649, 'urban dust/organics,' and 1650, 'diesel particulate matter', using a microsuspension assay. A WHO/IPCS/CSCM study

S.T. Bagley, S.L. Stoltz, D.M. Becker and R.E. Keen (U.S.A.)

81

Salmonella mutagenicity of three complex mixtures assayed with the microsuspension technique. A WHO/IPCS/CSCM study

E. Agurell and C. Stensman (Sweden)

87

Results of a comparative study on the Salmonella pre-incubation and plate incorporation assays using test samples from the IPCS collaborative study

S. Goto, O. Endo and H. Matsushita (Japan)

93

Mutagenicity and chemical analysis of sequential organic extracts of airborne particulates

S. Savard, R. Otson and G.R. Douglas (Canada)

101

Mutagenicity studies on complex environmental mixtures: selection of solvent system for extraction

P. Aagaard Nielsen (Denmark)

117

Application of a semi-automated SOS chromotest for measuring genotoxicities of complex environmental mixtures containing polycyclic aromatic hydrocarbons

L. Nylund, E. Hakala and M. Sorsa (Finland)

125

Activation of pro-mutagens in complex mixtures by rat liver S9 systems

Y.A. Courtois, M.L. Pesle and B. Festy (France)

133

Influence of the microsomal inducer and the incubation system on mutagenicity of complex mixtures

H. Tokiwa, K. Horikawa and N. Sera (Japan)

139

[end of special issue]

Special Issue
DNA Amplification
edited by Manfred Schwab

Gene amplification; What are we learning? R.T. Schimke (USA)	145
From amplification to function: the case of the <i>MDR1</i> gene I.B. Roninson (U.S.A.)	151
Regularities of karyotypic evolution during stepwise amplification of genes determining drug resistance B.P. Kopnin, O.I. Sokova and N.S. Demidova (U.S.S.R.)	163
Amplification of the dihydrofolate reductase gene in methotrexate-resistant Chinese hamster cells J.L. Hamlin (U.S.A.)	179
Induction of gene amplification by 5-aza-2'-deoxycytidine M.E. Perry, M. Rolfe, P. McIntyre, M. Commane and G.R. Stark (Great Britain)	189
Molecular dissection of mammalian gene amplification: New mechanistic insights revealed by analyses of very early events B.E. Windle and G.M. Wahl (USA)	199
A branching process model of gene amplification following chromosome breakage M. Kimmel, D.E. Axelrod and G.M. Wahl (U.S.A.)	225
Gene amplification in a human osteosarcoma cell line results in the persistence of the original chromosome and the formation of translocation chromosomes H. Roelofs, J.G. Tasseront-de Jong, J. van der Wal-Aker, R.J.T. Rodenburg, G.B.M. van Houten, P. van de Putte and M. Giphart-Gassler (The Netherlands)	241
The evolution of the amplified adenylate deaminase 2 domains in Chinese hamster cells suggests the sequential operation of different mechanisms of DNA amplification F. Toledo, K.A. Smith, G. Buttin and M. Debatisse (France, U.K.)	261
In vivo gene amplification in non-cancerous cells: cholinesterase genes and oncogenes amplify in thrombocytopenia associated with lupus erythematosus H. Zakut, Y. Lapidot-Lifson, R. Beeri, A. Ballin and H. Soreq (Israel)	275
Gene amplification in the murine SEWA system G. Levan, F. Ståhl and Y. Wettergren (Sweden)	285
Amplification of the <i>N-myc</i> gene in human neuroblastomas: tandemly repeated amplicons within homogeneously staining regions on different chromosomes with the retention of single copy gene at the resident site L.C. Amler, Y. Shibasaki, L. Savelyeva and M. Schwab (Germany)	291
Amplified cellular oncogenes in neoplasms of the human central nervous system G.N. Fuller and S.H. Bigner (U.S.A.)	299
Amplification and rearrangement of <i>L-myc</i> in human small-cell lung cancer T.P. Mäkelä, K. Saksela and K. Alitalo (Finland)	307
DNA amplification at 11q13 in human cancer: from complexity to perplexity P. Gaudray, P. Szepietowski, C. Escot, D. Birnbaum and C. Theillet (France)	317
DNA sequences amplified in cancer cells: an interface between tumor biology and human genome analysis Y. Shiloh, O. Mor, A. Manor, I. Bar-Am, G. Rotman, J. Eubanks, M. Gutman, G.N. Ranzani, J. Houldsworth, G. Evans and L. Avivi (Israel, U.S.A., Italy)	329
The mechanism of carcinogen-induced DNA amplification: in vivo and in vitro studies M.I. Aladjem and S. Lavi (Israel)	339
[end of special issue]	
Contents, Vol. 276 (1992)	345